

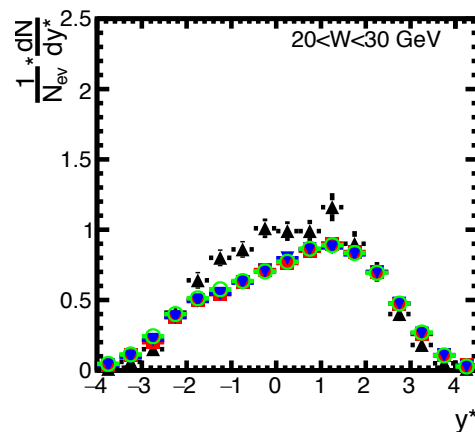
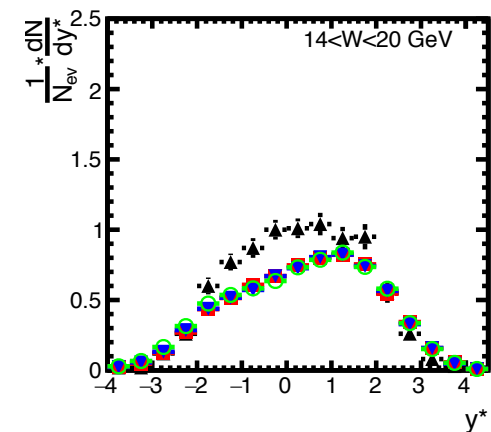
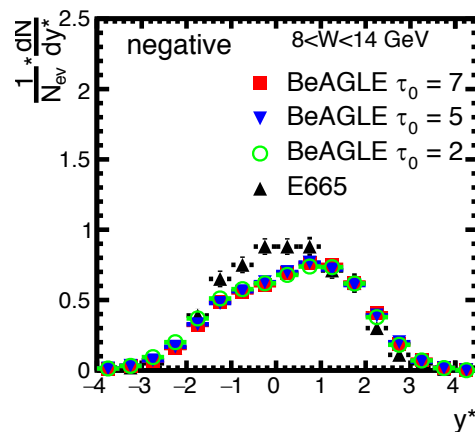
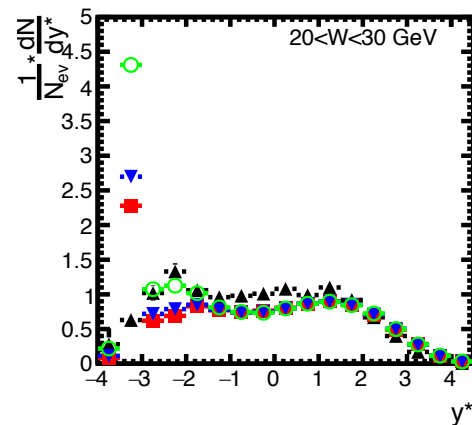
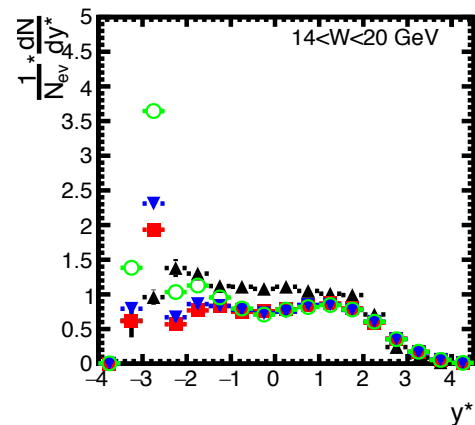
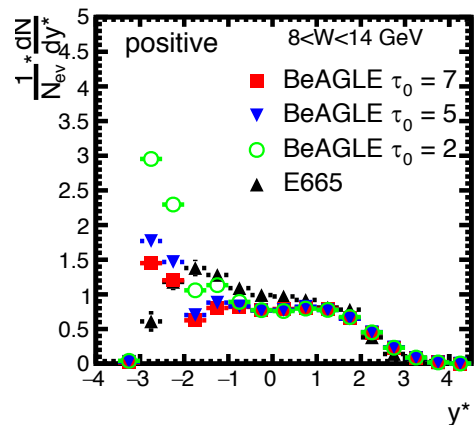
BeAGLE vs. E665

Wan Chang

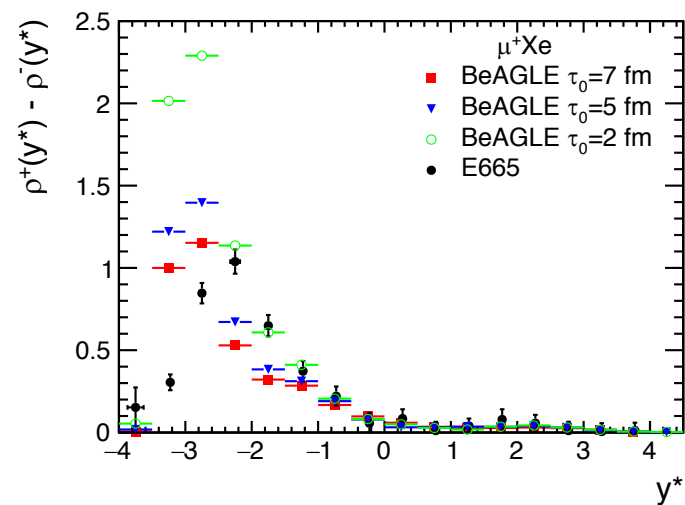
2020/06/18

- MSTP(94)=3 (Default) - changes xL distribution of leading proton a lot, shifting it towards mid-rapidity.
- PARP(91)=PARP(99)=PARJ(21)=PARJ(170)=0.4
- Input file:
/gpfs/mnt/gpfs02/eic/wanchang/BeAGLE_data/muXe_tau7_20200617_MarkUpdate/muXe_E665_40k_Shd3_tau7_kt=ptfrag=0.4_trigcut_US0.inp
- /gpfs/mnt/gpfs02/eic/wanchang/BeAGLE_data/muXe_tau7_20200617_MarkUpdate/eAS3noq

muXe

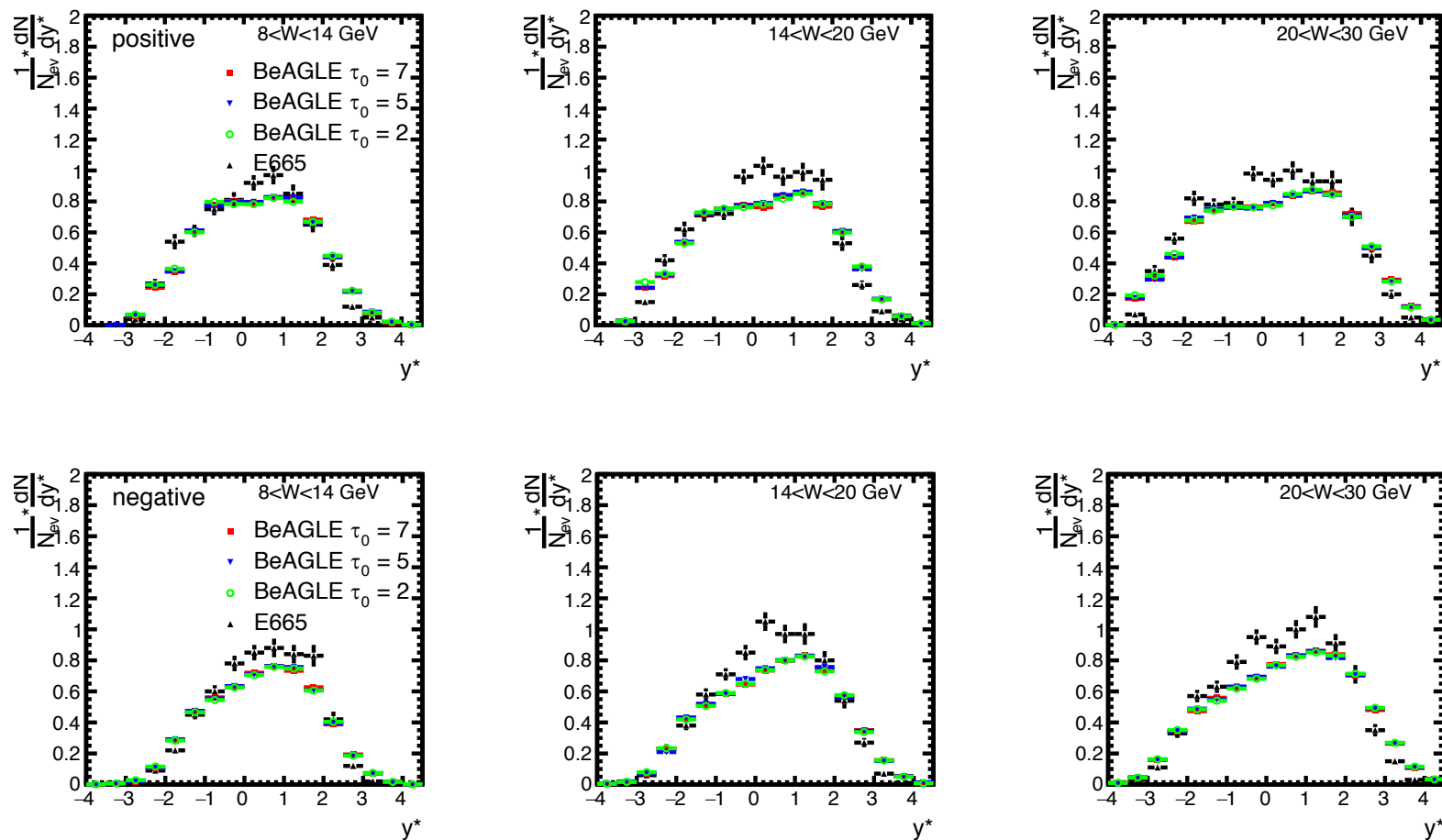


The normalized cms-rapidity distribution of hadronic net charge for muXe:

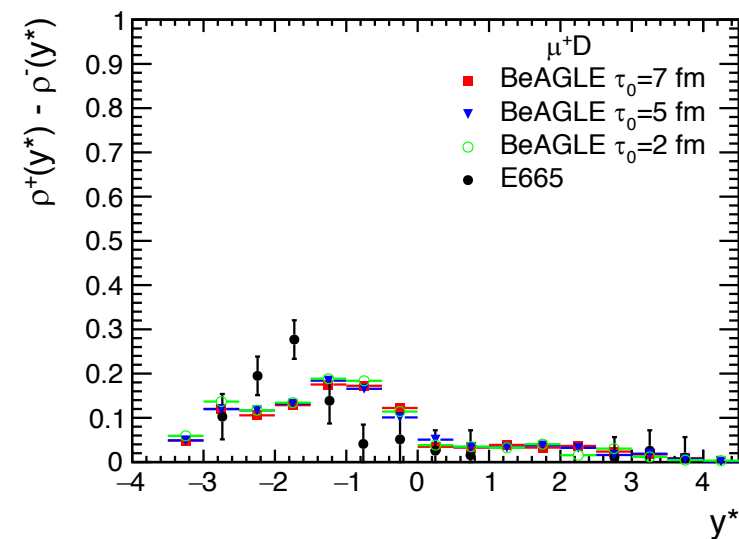


It seems like the y^* peak doesn't shift to higher y^* .??

muD



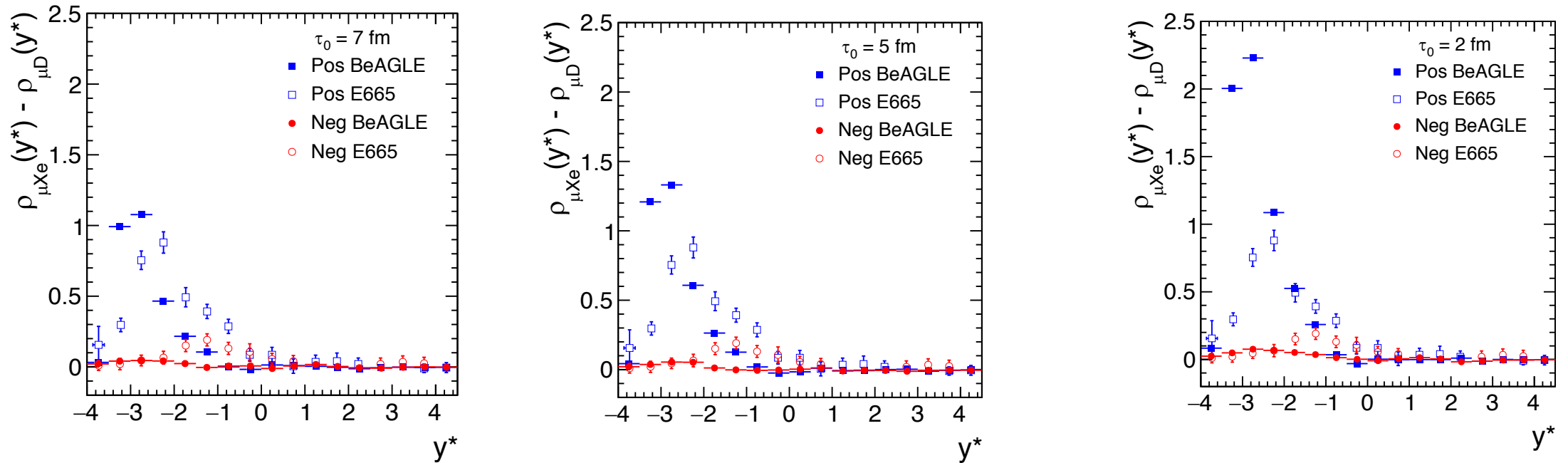
The normalized cms-rapidity distribution of hadronic net charge for muD:



The distributions are almost identical for different τ_0 .
It doesn't agree very well in the mid-rapidity.

$$\rho_{\mu Xe}(y^*) - \rho_{\mu D}(y^*)$$

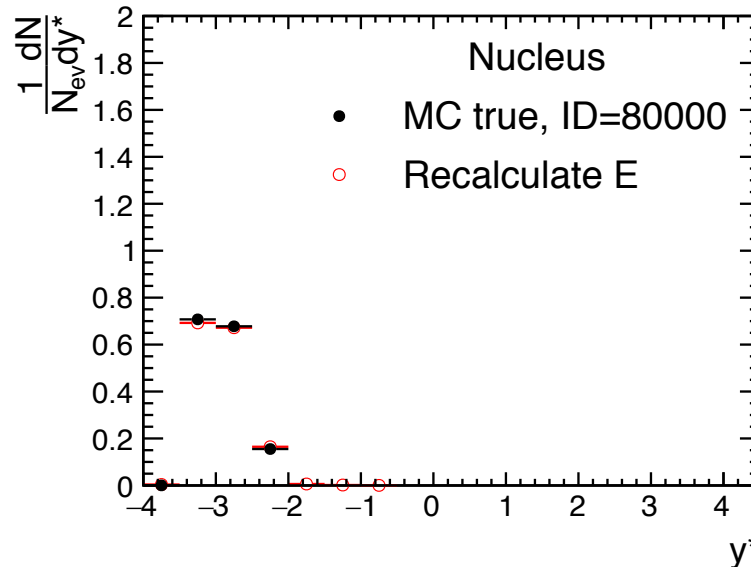
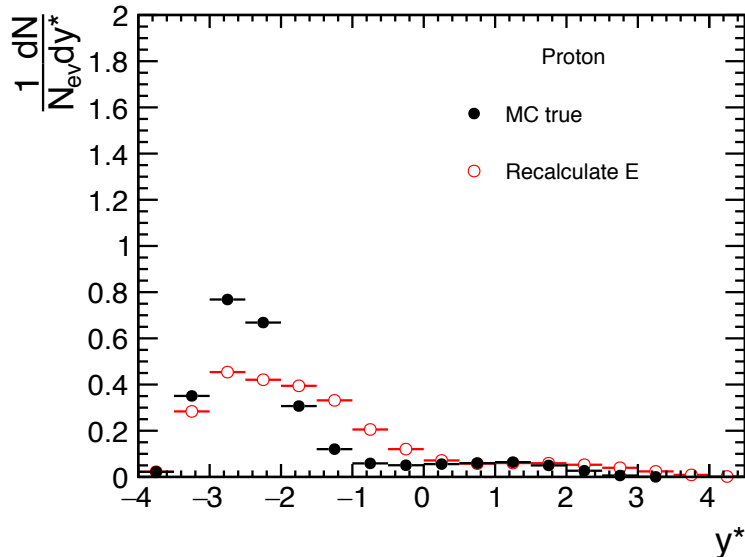
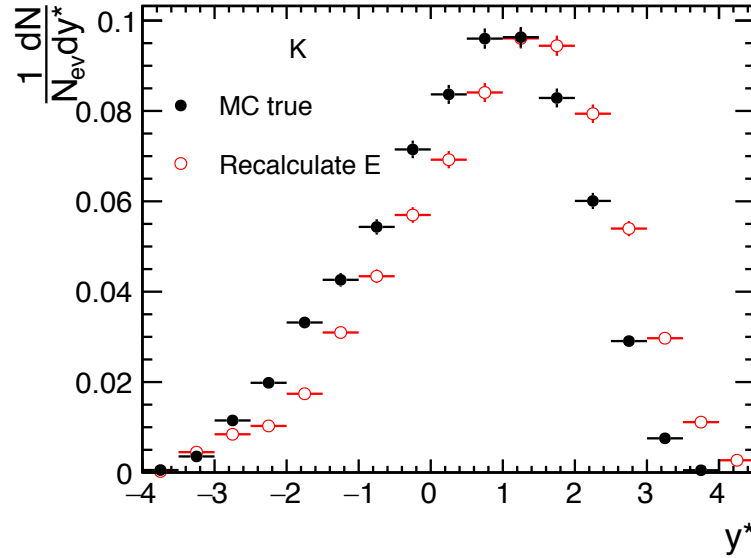
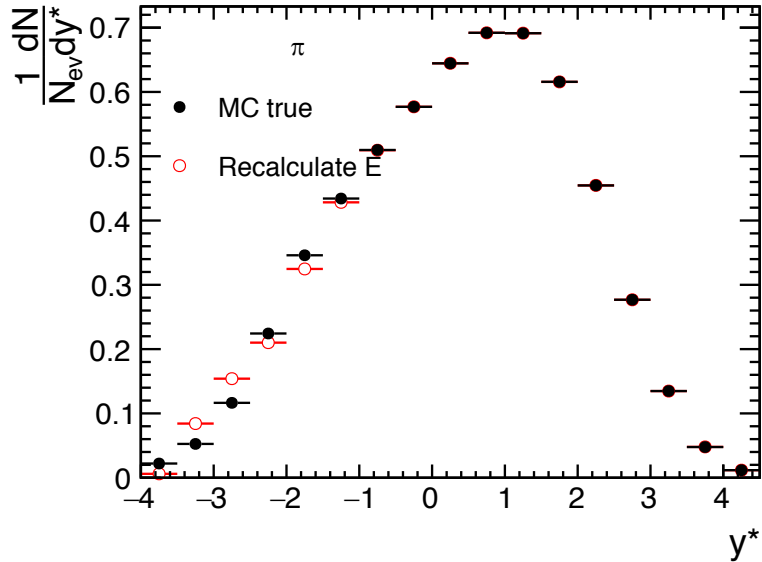
Difference of the normalized cms-rapidity distributions between muXe and muD scattering, for positive (blue) and negative hadrons (red) with different τ_0 :



It doesn't agree very well in backward.

Y_{cms} distribution of π^+ , K^+ , p, nucleus with $\tau_0 = 7$ fm

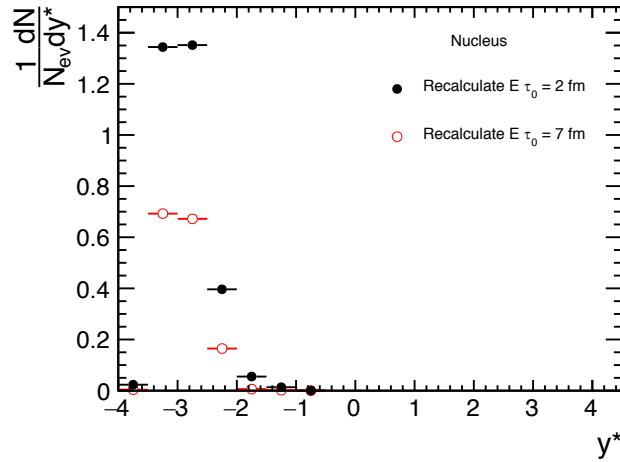
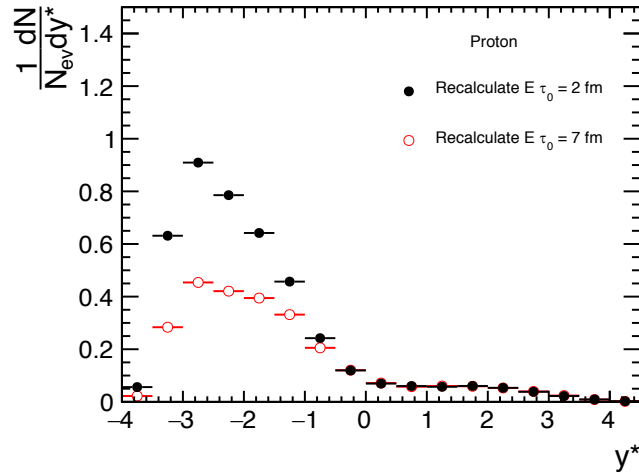
$\tau_0 = 7$ fm



In the peak of backward(-3~-2), protons and nucleus dominate.

Ycms distribution

Ycms distribution of p,nucleus for tau0 =2 vs tau0 =7 fm:



Ycms distribution of NoBeam ≥ 10 vs. NoBeam < 10 :

NoBeam ≥ 10 is particles involved in INC.
NoBeam < 10 is particles not involved in INC

